



| REPAIR SAVES FAMILIES BIG

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U.S. PIRG

| We spend a *lot* on new electronics.

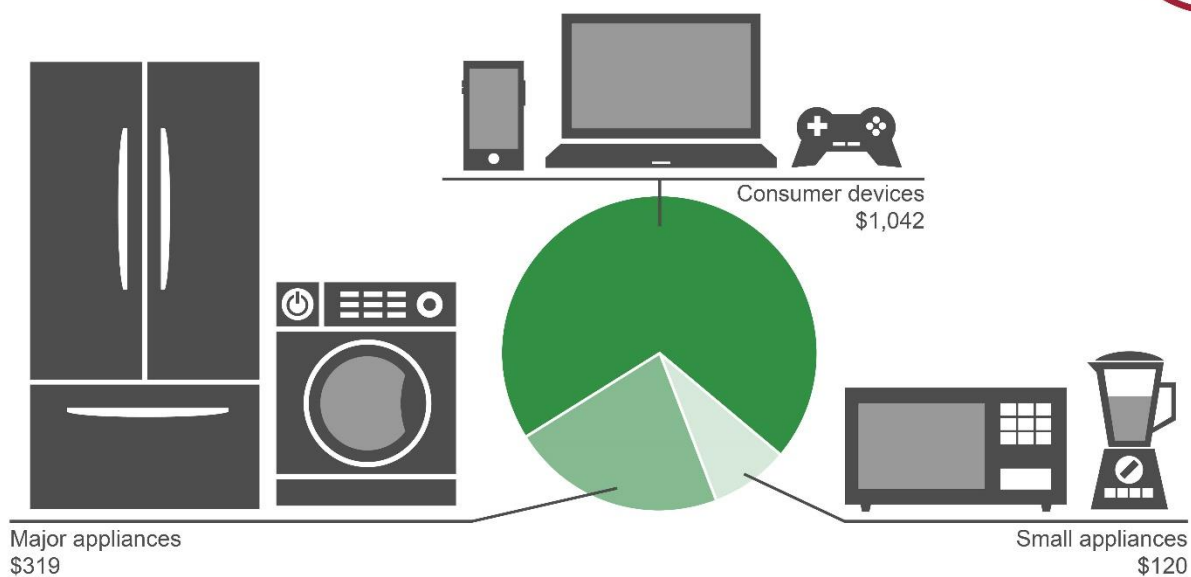
Especially during the pandemic, we rely on the electronic devices in our homes. From telecommuting to remote learning, from making dinner to doing laundry, we need our devices working.

When our older devices need repair, we might be convinced that it's easier or better to just replace them. After all, the "new and improved" versions will be better, right? Unfortunately, that's not always the case, and the products we buy are coming with shorter and shorter lifespans.¹

Our research shows that as of 2019, American households spend about **\$1,480 purchasing new electronic products per year.**

On average, Americans have **24 pieces of electronics** in their homes.² As more things become digital, we are spending more – and replacing more.

Americans are spending about \$1,480 per household on new electronics every year.



Rapidly replacing electronics isn't sustainable.

The cost of replacing broken laptops, refrigerators, and other electronic products can be burdensome, not only to family budgets, but the environment as well. The average American family generates about **176 pounds of electronic waste each year,**³ and nationally, the **United States generates 6.9 million tons of electronic waste.**

When we throw out an electronic product that can be repaired, we contribute to the fastest growing waste stream in the world,⁴ while adding toxic elements such as lead, mercury, and cadmium into our landfills.⁵

Luckily, repair can help save our planet and our finances.

America's electronic waste is piling up



6.9 MILLION

TONS PER YEAR

The average family generates 176 pounds of electronic waste each year, and the United States generates some 6.9 million tons nationally.

| If we repaired products instead of replacing them, we'd save BIG.

Repair saves money – more than you might think. When the cost of repair inches toward the cost of replacement, it might seem like buying the new product is cheaper. But fixing the product and extending its lifespan leads to big savings.

Repair could reduce household spending on electronics and appliances by **22 percent, which would save an average family approximately \$330 per year.**

This means that across 122 million national households,⁶ **repair could save Americans a total of \$40 billion annually.**

Consumers can save big by repairing electronics



\$40 BILLION
PER YEAR IN THE U.S.

Repair could reduce household spending on electronics and appliances by 22 percent, which would save an average family approximately \$330 per year. This means that across America's 122 million households, repair could save residents a total of \$40 BILLION.

Empowering repair strengthens the local economy.

Not only does repair save families money in a tight economy, the money people do spend on repair provides more benefits to the local economy.

Repair makes our communities more resilient. Instead of relying on the global supply chain to bring a never-ending supply of new stuff, repair helps us keep devices going using only local resources. A robust repair ecosystem with more people in our neighborhoods working repair jobs, results in lower repair costs quicker and service. But if manufacturers further restrict repair, downtime and prices go up. Eventually, people give up and buy new.

The money people do spend on repair circulates locally, rather than being sent to manufacturing operations across the country or, more likely, overseas.⁷

With more families staying home, local repair is critical.

Manufacturer backlogs caused millions of students to go without a laptop for remote learning.⁸ A system built on repair and reuse in local settings could have mitigated this.⁹

When the pandemic hit, many people couldn't afford or even find new appliances. A critical shortfall of local appliance repair, fueled by restrictions to the field, made the problem worse. The Bureau of Labor Statistics predicts that appliance repair will decline 6.9 percent by 2029, decreasing from 38,400 to 35,800 workers.¹⁰

Right to Repair is essential to unleashing repair.

Repair is critical to maintaining our lifestyles and saving money. By relying on local repair, households can keep their electronic products humming without breaking the bank. However, when manufacturers restrict access to the tools and manuals necessary for repair, they ultimately chip away at the resilience our communities need to bounce back in the face of global disruptions.

Now is a critical time to make Right to Repair the standard. Electronic manufacturers must heed our call to remove barriers to repair. If not, we must call on our state representatives to take action.

Leaders in state capitals should be vocal about their support for repair-friendly legislation and demand that manufacturers lower restrictions on necessary tools, parts, and manuals. If electronics companies won't remedy the situation, our leaders must.

METHODOLOGY

To create a more comprehensive estimate of household spending on electronic products we totaled the average household expenditures from three categories: major appliances, small appliances, and consumer devices.

Average household expenditure on major appliances was \$319 from the third quarter of 2018 to the second quarter of 2019 (a 12-month period).¹¹ Within that same time frame from 2018 to 2019, American households spend an average of \$120 on small appliances.¹²

For consumer devices, Statista estimated that the average revenue generated per capita was \$401 in 2019.¹³ There were an average of 2.6 people per household in the United States in 2019, meaning that average household spending on consumer electronics was approximately \$1042.60.¹⁴ In total, we estimated that average annual spending on electronics is \$1,481.60 per household.

We determined the average expected lifespan of smartphones,¹⁵ laptops,¹⁶ refrigerators,¹⁷ and washing machines.¹⁸ In addition, we located the average cost to replace¹⁹⁻²² or repair these four product types.²³⁻²⁶

We calculated the average annual cost of ownership without repair by dividing average replacement cost by average lifespan for each product. To calculate the average annual cost of ownership with repair, we added the replacement cost of each product with its respective repair cost, then divided by an extended product lifespan.

The process of calculating annual savings entailed subtracting the average cost of ownership with repair from the average cost of ownership without repair for each of the four device

categories. This resulted in our estimated total savings of \$330.23, per household, just over 22 percent.

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